

AMENDMENTS TO THE CLAIMS

1-37. (Cancelled)

38. (Previously Presented) A method of depigmenting or bleaching human skin, body hair and/or hair of a head of a subject to lighten a color for purely cosmetic purposes comprising topical application to the skin, the body hair and/or the hair of the head of said subject of a cosmetic composition comprising at least one oligonucleotide having between 7 and 25 nucleotides, capable of specifically hybridising with genes or gene products coding for protein kinase C beta-1 (PKC beta-1).

39-41. (Cancelled)

42. (Previously Presented) The method according to claim 38, wherein said composition comprises at least one oligonucleotide capable of specifically hybridising with any 5' to 3' regions, coding or not coding for genes coding for PKC beta-1.

43. (Previously Presented) The method according to claim 38, wherein said composition comprises at least one oligonucleotide whose sequence is one of sequences SEQ ID NO. 1 to SEQ ID NO. 5 having the following significance:

SEQ ID NO.1: ACA CCC CAG GCT CAA CGA TG

SEQ ID NO. 2: TGG AGT TTG CAT TCA CCT AC

SEQ ID NO. 3: AAA GGC CTC TAA GAC AAG CT

SEQ ID NO. 4: GCC AGC ATC TGC ACC GTG AA

SEQ ID NO. 5: CCG AAG CTT ACT CAC AAT TT

44. (Previously Presented) The method according to claim 43, wherein said composition comprises at least one oligonucleotide whose sequence is either SEQ ID NO. 1 or SEQ ID NO. 4.

45. (Previously Presented) The method according to claim 43, wherein said composition comprises at least one oligonucleotide whose sequence is SEQ ID NO. 1.
46. (Previously Presented) The method according to claim 38, wherein said composition comprises at least one oligonucleotide comprising one or more chemical modifications to its sugar moieties, its nucleobase moieties or its internucleotide skeleton, the aforesaid modifications conferring improved physicochemical characteristics to said oligonucleotide.
47. (Previously Presented) The method according to claim 38, wherein said composition comprises at least one oligonucleotide of which a sugar moiety comprises a 2'-O-fluoro or 2'-O-alkyl substituent.
48. (Previously Presented) The method according to claim 38, wherein said composition comprises at least one oligonucleotide of which some phosphodiester groups of its internucleotide skeleton are replaced by phosphorothioate groups.
49. (Previously Presented) The method according to claim 38, wherein said composition comprises at least one oligonucleotide of which some phosphodiester groups of its internucleotide skeleton are replaced by methylphosphonate groups.
50. (Previously Presented) The method according to claim 38, wherein said composition comprises at least one oligonucleotide of which all phosphodiester groups are replaced by phosphorothioate groups.
51. (Previously Presented) The method according to claim 38, wherein said composition comprises at least one oligonucleotide of which all phosphodiester groups are replaced by methylphosphonate groups.

52. (Previously Presented) The method according to claim 38, wherein said composition comprises at least one oligonucleotide of which all phosphodiester groups are replaced in whole or in part by phosphorothioate groups and/or by methylphosphonate groups.

53. (Previously Presented) The method according to claim 38, wherein said composition comprises at least one oligonucleotide to which is grafted a linear nucleic acid or peptide vector, or a circular plasmid vector.

54. (Previously Presented) The method according to claim 38, wherein said composition comprises one or more active agents chosen from among an antisense oligonucleotide directed against tyrosinase gene expression products; an antisense oligonucleotide directed against tyrosinase-related-protein 1 (TRP-1) gene expression products; ellagic acid and its derivatives; resorcinol and its derivatives; vitamin C and its derivatives; pantothenate sulfonate and its derivatives; molecules interfering directly or indirectly with alpha-melanocyte stimulating hormone (a-MSH) or its receptor or with adrenocorticotrophic hormone (ACTH); polyols such as glycerin, glycol or propylene glycol; vitamins; keratolytic and/or desquamating agents such as salicylic acid and its derivatives; alpha-hydroxyacids such as lactic acid or malic acid, alone or grafted; ascorbic acid and its derivatives; retinoids and carotenoids in liposomal preparation or not, such as retinaldehyde; retinol and its derivatives such as palmitate, propionate or acetate, beta-carotene; antiglycation agents and/or antioxidants alone or in association such as tocopherol and its derivatives, thiotaurine, hypotaurine, aminoguanidine, thiamine pyrophosphate, pyridoxamine, lysine, histidine, arginine, phenylalanine, pyridoxine, adenosine triphosphate; anti-inflammatory agents such as stearyl glycyrrhetinate; soothing agents and mixtures thereof; and chemical or physical sun blocks such as the octyl methoxycinnamate, butylmethoxydibenzoyl-methane, titanium oxide and zinc oxide.

55. (Previously Presented) The method according to claim 38, wherein the at least one oligonucleotide represents 0.00001% to 10% of a total weight of the composition.

56. (Previously Presented) The method according to claim 38, wherein said composition is presented in the form of an emulsion containing an oil, an emulsifying agent chosen from among fatty acid and polyethylene glycol esters such as PEG-20 stearate, and fatty acid and glycerin esters such as glycerin stearate, and an co-emulsifying agent.

57. (Previously Presented) A method for treatment of regional hyper-pigmentation by melanocyte hyperactivity such as idiopathic melasma, local hyper-pigmentation by benign melanocyte hyperactivity and proliferation such as pigmentary age spots (actinic lentigo), accidental hyper-pigmentation such as photosensitization or post-lesion healing in a subject in need thereof, comprising topical application to the hyper-pigmented skin areas of said subject of a topical pharmaceutical composition comprising at least one oligonucleotide having between 7 and 25 nucleotides, capable of specifically hybridising with genes or gene products coding for protein kinase C beta-1 (PKC beta-1).

58-59. (Cancelled)

60. (Previously Presented) The method of claim 38, wherein the topical application comprises application of the composition to the hair of the head.

61. (Previously Presented) The method of claim 38, wherein the topical application comprises application of the composition to the face.

62. (Previously Presented) The method of claim 38, wherein the application of the composition comprises application of a makeup.

63. (Previously Presented) The method of claim 38, wherein the composition comprises an SPF protective fluid.

64. (Previously Presented) The method of claim 38, wherein the composition further comprises at least one additional active agent that is a depigmenting substance.

65. (Previously Presented) The method of claim 64, wherein the active agent is selected from substances that inhibit the activity of tyrosinase, an antisense oligonucleotide directed against tyrosinase gene expression products, an antisense oligonucleotide directed against tyrosinase-related-protein 1 (TRP-1) gene expression products, hydroquinone and its derivatives, placental extracts, kojic acid, arbutin, iminophenols, association of carnitin and quinone, amide derivatives of amino-phenol, and derivatives of benzothiazole.

66. (Previously Presented) The method of claim 64, with the proviso that the topical application to the skin, the body hair and/or the hair of the head does not comprise skin having psoriasis or skin cancer.

67. (New) The method of claim 38, wherein the topical application of the composition to the skin results in depigmentation by modifying the expression of only PKC beta 1.